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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Kunio OKADA, et al.

Serial Number: 10/036,421

Group Art Unit: 1761

Filed: January 7, 2002

Examiner: BECKER, DREW E

For: EMULSION FOR PROCESSED MEAT AND PROCESSED MEAT
USING THE EMULSION

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents

Washington, D. C. 20231

Sir:

The undersigned, Ktsuichi TOKUMOTO, declares as follows:

I am a National of Japan, residing at 22-8, Sawamachi, Oasa, Ebetsu-shi, Hokkaido 069-0842 JAPAN. I am a Manager of Department of Technology Development of HOKUBEE CO., LTD. which is located in Hokkaido, Japan.

I received a Bachelor's degree in Biochemistry in 1994 from Obihiro University of Agriculture and Veterinary Medicine. In 1994, I joined HOKUBEE CO., LTD. and have worked on developing new technologies of producing processed meat.

Under my direct supervision, the following experiments were conducted:

1. Object of the Experiment

The object of the experiment is to provide further evidence that component (C), which is disclosed in the Application US Serial No. 10/036,421,

unexpectedly improves the emulsifying properties and stability of an emulsion. Emulsions which were prepared do not contain component (C) in the emulsions disclosed in Examples 45 and 46; and in Examples 29 and 30. The properties of emulsions thus obtained were compared with the emulsions obtained in Examples 45 and 46; and in Examples 29 and 30 in Serial No. 10/036,421 Application.

2. Experiments

(a) Comparative Examples 5 and 6

In accordance with the same procedure disclosed in Examples 45 and 46 of 10/036,421 Application, with the exception that arginine as component (C) was not added, a mixed oil and fat containing tallow and rapeseed oil was emulsified. The emulsifying properties and stabilities of the obtained emulsions were evaluated by the method described in page 14, under the title of <Emulsion> in the specification of Application Serial No. 10/036,421 and compared with the results obtained in Examples 45 and 46 of Serial No. 10/036,421 Application. The results are summarized in Table 9.

(b) Comparative Examples 7 and 8

In accordance with the same procedure disclosed in Examples 29 and 30 of Serial No. 10/036,421 Application, with the exception that arginine as component (C) was not added, a mixed oil and fat containing tallow and rapeseed oil was emulsified. The emulsifying properties and stabilities of the obtained emulsions were evaluated by the method described in page 14, under the title of <Emulsion> in the specification Application Serial No. 10/036,421 and compared with the results obtained in Examples 45 and 46 of 10/036,421 Application. The results are summarized in Table 10.

3. Results of experiments

Table 9 Evaluation of emulsion properties

| Example | 45 | 46 | Comparative Example 5 | Comparative Example 6 |
|------------------------|--------------------|--------------------|--------------------------|--------------------------|
| Components of emulsion | | | | |
| (part by weight) | | | | |
| component (B) (a) | | | | |
| type | mono- glyceride | mono- glyceride | mono- glyceride | mono- glyceride |
| amount | 0.5 | 0.5 | 0.5 | 0.5 |
| component (B) (b) | | | | |
| type | WPI | WPI | WPI | WPI |
| amount | 0.5 | 3.0 | 0.5 | 3.0 |
| component (C) | | | | |
| type | arginine | arginine | — | — |
| amount | 1.0 | 1.0 | — | — |
| Properties of emulsion | | | | |
| emulsifying property | 8 | 9 | 7 | 8 |
| stability of emulsion | 8 | 9 | 6 | 6 |
| total evaluation | 8.0 | 9.0 | 7.0 | 7.5 |

Table 10 Evaluation of emulsion properties

| Example | 29 | 30 | Comparative Ex. 7 | Comparative Ex. 8 |
|------------------------|----------|----------|----------------------|----------------------|
| Components of emulsion | | | | |
| (part by weight) | | | | |
| component (B) (b) | | | | |
| type | WPI | WPI | WPI | WPI |
| amount | 0.5 | 1.0 | 0.5 | 1.0 |
| component (C) | | | | |
| type | arginine | arginine | — | — |
| amount | 1.0 | 1.0 | — | — |
| Properties of emulsion | | | | |
| emulsifying property | 5 | 6 | 3 | 4 |
| stability of emulsion | 4 | 5 | 2 | 4 |
| total evaluation | 4.5 | 5.5 | 3.5 | 4 |

4. Conclusion

As seen from the results summarized in Tables 9 and 10, the effect of component (C) in an emulsion comprising a mixed oil and fat containing tallow and rapeseed oil as component (A), an emulsifier as (B) and a basic amino acid as component (C) improves the quality of an emulsion.

The undersigned declares that all statements made herein of his knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity at the application or any patent issued thereon.

Signed this day of , 2004

Katsuichi TOKUMOTO